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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,633	12/28/2001	Benjamin Niles Eldridge	P3C1-US	6089

27520 7590 06/23/2005

FORMFACTOR, INC.
LEGAL DEPARTMENT
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EXAMINER

ARBES, CARL J

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,633

Applicant(s)

ELDRIDGE ET AL.

Examiner

C. J. Arbes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 375-424 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 373-424 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date heron
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

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It is noted and Applicants are hereby noticed that the continuing data according to the Patent Office's records does not match or coincide with Applicants' representations in the instant Application. Therefore Applicants are duly requested to carefully review and correct, if necessary the ancestry of the instant Application so that the continuing data matches, tracks or correlates with those records of the ancestry held in the Patent Office or alternatively provide a showing and indicate that the Patent Office records are incorrect.

An Office Action on the merits of Claims 375-424 now follows.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 375, 380, 381-389, 391-396, 398, 400-409, 411, 412, 414-418, 420, 423 and 424 are rejected under 35 U.S.C. 102(b) as being anticipated by Carver Patent No. 4,916,002; hereinafter Carver. As applied to the rejected claims the document speaks for itself. For a summary discussion of how this document is being construed see remarks *infra*.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 375-424 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carver.

Carver teaches a method of making a contact structure comprising fabricating a plurality contact assemblies (Cf. Figs 5 and 7 and Col. 5), providing a substrate comprising an array of electrical connections on the surface of electrical connections on the surface and attaching plurality of contact structures (such as 24) to the array of electrical connections (such as 30 and/or 56) It would have been obvious to provide a substrate comprising an array of electrical connections on a surface of the substrate (if indeed Carver does not expressly teach the same) so that the contact assembly can be batch assembled (which Carver does expressly teach). As applied to claims 376-379 it is held that each time that a contact assembly is made up one must "pool" or select one or more of the groupings of contact structures prior to the attaching step. Alternatively these limitations are held to be mere design choice since there is no specific purpose therefore nor any. Specific problem which is solved thereby. As applied to claims 380, 381, 405, it held to have been obvious to provide that the electrical connection with the metallic pad be metallic and also resilient in order for the assembly to operate more efficiently and effectively. Metallic connections would be the optimum choice with respect to providing both electrical conductivity and also higher resilience. Carver also teaches removing contact structures from the sacrificial substrate (Cf. *inter alia* Claim 1). As applied to claims 384, 385, 391-393, 407, 408, 414-416 Carver teaches a patterned a photoresist (Cf. Col 6) before the contact forming step is performed.. As applied to claim 389 it is submitted that the materials at 30 and 56 can be construed as


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wires within the meanings of these claims.. As applied to Claims 390, 397, 413 and 421 it is held to be old to overcoat the wires (Cf. e.g. on page 14). Hence it would have been obvious to overcoat to the wires which at least partially envelope the wires. As applied to Claims 399 and 422 it is held that the limitation of using this process of making .g. probe assemblies would have been obvious to a POSITA since one would be able to have a measurement device which is microminature and also resilient which would be ideal for a probe card assembly. Alternatively this limitation of providing a probe card assembly is held not to narrow the method claim and therefore is given little or no patentable weight.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. J. Arbes whose telephone number is 571-272-4563. The examiner can normally be reached on M, T, R and F from 8 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Vo, can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CARL J. ARBES
PRIMARY EXAMINER